SPECIAL AIRWORTHINESS INFORMATION BULLETIN

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This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin alerts you, owners, operators, and certificated repair facilities of **Pratt & Whitney (P&W) JT8D series turbofan engines** of issues regarding a certain type of 8th stage high pressure compressor (HPC) stator repair. An inflight shutdown can potentially occur if you don't follow the proper repair instructions.

Background

There have been 36 service events since 1990 attributed to the cracking and subsequent failure of an 8th stage HPC stator vane. Fourteen of these events resulted in an in-flight shutdown. All failures occurring on 8th stage HPC stator assemblies were braze-repaired on the outer diameter (OD). There are no reports of failed production hardware with a strap-welded OD. All failed braze-repaired stator vanes were repaired in accordance with the JT8D-200 Engine Manual and approved repair technical data.

Recent operational data from the field suggests that shorter, more frequent flights are more prone to cracking on the OD of the stator vane trailing edge. Due to vibration, this crack will extend to the leading edge, causing cracking at the inner diameter and release of the vane.

Currently, P&W is developing new repairs to return the stator vane assemblies to the production configuration and will inform the fleet of the new repairs through service bulletins. These repairs should be available some time this year.

Recommendations

The population of braze-repaired 8th stage HPC stator assemblies should not be increased, because strap welded 8th stage HPC stator assemblies are more robust.

After P&W has released the service bulletins, we recommend incorporation of the more durable strap-weld configuration into the fleet. Incorporation should occur when the 8th stage stator vane assembly is fully accessible. We also recommend that you restrict use of the braze repair to **stator vane assemblies** that have already been braze-repaired.

For Further Information, Contact

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